

Smyth County has a moderate risk profile. Chloride is the primary concern, driven by road/geological sources. Contamination is often invisible — testing is the only way to confirm your well's safety.

N/A  
HOUSEHOLDS ON  
PRIVATE WELLS

Varies  
PRIMARY  
AQUIFER TYPE

**MODERATE**  
OVERALL  
RISK LEVEL

**YOUR TOP WATER QUALITY RISKS**

CONTAMINANT	HOW COMMON	RISK LEVEL	SOURCE & CONTEXT
<b>Chloride*</b>	~22% above aesthetic limit	Moderate	Road/Geological — Road salt application and natural mineral deposits
<b>Radont</b>	~100% of wells	Advisory	Geological — Radioactive gas dissolved from uranium-bearing rock
<b>Arsenic</b>	~6% above limit	Moderate	Geological — Naturally dissolves from bedrock and glacial sediment
<b>Nitrate</b>	~98% of wells	Low-Moderate	Agricultural — Fertilizer, manure, and septic systems leaching into groundwater
<b>Nitrite</b>	~83% of wells	Low-Moderate	

\* Secondary standard — an aesthetic limit for taste, odor, or staining. Not a health-based EPA limit.

† No finalized EPA primary MCL. Figure shows detection frequency, not regulatory exceedance.

**WHAT TO DO NEXT**

- Order a water test.**  
Test for Chloride, Radon, Arsenic, Nitrate, coliform bacteria. Bacteria annually; others every 3–5 years.
- Get your free county report.**  
See full data, treatment options, and certified labs at <https://yourwaterreport.com/states/va/smyth-county/>
- Upload your lab results.**  
We'll interpret them, flag anything above limits, and recommend next steps — free.

**KNOW YOUR WELL**

Well age / year drilled \_\_\_\_\_

Last water test date \_\_\_\_\_

Treatment systems installed \_\_\_\_\_

Well driller / service contact \_\_\_\_\_

**WHAT YOUR RESULTS MEAN**

Use this to interpret your lab report — match the contaminant to your result.

IF YOUR TEST SHOWS	WHAT IT MEANS	CONSIDER
<b>Bacteria detected</b>	Immediate concern	Shock chlorination; add UV system
<b>Radon &gt; 4,000 pCi/L</b>	EPA proposed limit; also affects indoor air	Aeration system; test indoor air
<b>Arsenic &gt; 10 µg/L</b>	EPA limit exceeded — chronic cancer risk	Reverse osmosis or activated alumina filter
<b>Nitrate &gt; 10 mg/L</b>	EPA limit exceeded — risk for infants	RO filter; avoid for bottle-fed infants

**WHO SHOULD USE THIS**

- Homeowners on private wells — not covered by public water testing
- Home buyers doing due diligence before closing
- Families with infants, elderly, or immunocompromised members
- Anyone who hasn't tested their well in the past 3 years

**LOCAL RESOURCES**

**Full county report**  
<https://yourwaterreport.com/states/va/smyth-county/>

Free personalized well water report at  
<https://yourwaterreport.com/states/va/smyth-county/>

Data: EPA ECHO · USGS NWIS · Water Quality Portal · U.S. Census ACS  
For informational purposes only. Contact a licensed professional for testing and treatment.